CLAIMS

What is claimed is:

1. A method, comprising:

    associating a resource with a monitor managed bean at a node of a

    monitor tree;

    requesting monitoring information regarding the associated resource from

    a runtime managed bean; and

    receiving the monitoring information at the node by the monitor managed

    bean.

2. The method of claim 1, further comprising:

    receiving a notification from the runtime managed bean at the node by the

    monitor managed bean, the notification including a signal indicating

    availability of the monitoring information; and

    in response to receiving the notification, requesting the monitoring

    information from the runtime managed bean.

3. The method of claim 1, further comprising:

    receiving a notification from a timer including an indication for the monitor

    managed bean to request the monitoring data; and

    in response to receiving the notification, requesting the monitoring

    information from the runtime managed bean.

4. The method of claim 1, wherein the runtime managed bean includes a

    resource monitor to monitor one or more resources including the

associated resource.

5.   The method of claim 4, wherein one or more resources include Java

resources associated with a Java 2 Platform, Enterprise Edition (J2EE)

engine, the Java resources include one ore more of the following: kernel,

services, interfaces, and libraries corresponding to a dispatcher or a

server associated with the J2EE engine.

6.   The method of claim 1, wherein the monitor tree is based on a Java

Management Extensions (JMX)-based Java monitoring architecture.

7.   The method of claim 1, further comprises coupling the monitor tree with a

central database and one or more client-level applications using a monitor

service, wherein the monitor service includes one or more of the following:

connectors, adaptors, interfaces, and applications.

8.   The method of claim 7, further comprises retrieving an Extensible Markup

Language (XML) file from the central database using the monitor service,

the XML file having semantics and directives to generate the monitor tree.

9.   The method of claim 1, wherein the monitor tree is generated using the

semantics and the directives from the XML file.

10.   The method of claim 7, wherein the one or more client-level applications

include one or more of the following: a computing center management

system, administrative tools, and third party tools.

11.   The method of claim 10, wherein the administrative tools include a visual

administrator having a monitor viewer to display the monitoring

information.

12. The method of claim 11, wherein the monitor viewer includes one or more of the following: a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer.

13. The method of claim 11, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource.

14. The method of claim 13, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored.

15. The method of claim 13, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource.

16. A method, comprising:

receiving a request at the runtime managed bean from a monitor managed bean at a node of a monitor tree for monitoring information corresponding to a resource associated with the monitor managed bean; and

in response to the request, providing the monitoring information

corresponding to the resource associated with the monitor

managed bean to the monitor managed bean at the node.

17. The method of claim 16, further comprises providing a runtime notification

from the runtime managed bean to the monitor managed bean at the

node, the runtime notification including a signal regarding availability of

the monitoring information.

18. The method of claim 16, further comprises providing a timer notification

from a timer to the monitor managed bean at the node, the timer

notification including a signal for the monitor managed bean to request the

monitoring data from the runtime managed bean.

19. The method of claim 16, wherein the monitor tree is based on a Java

Management Extensions (JMX)-based Java monitoring architecture.

20. The method of claim 16, further comprises coupling the monitor tree with

a central database and one or more client-level applications using a

monitor service, wherein the monitor service includes one or more of the

following: connectors, adaptors, interfaces, and applications.

21. The method of claim 16, wherein the monitoring information includes one

or more of the following: current monitoring status of the associated

resource, monitor history of the associated resource, and general

information regarding the associated resource.

22. The method of claim 21, wherein the current monitoring status includes a

color-coded indication of at least one of the following: the associated

resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored.

23. The method of claim 21, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource.

24. A Java monitoring architecture, comprising

a monitor tree having a plurality of nodes, each of the plurality of nodes corresponding to a monitor managed bean and an associated resource of a plurality of resources; and

a runtime managed bean in communication with the plurality of nodes to monitor the plurality of resources, and to provide monitoring information regarding the associated resource to the monitor managed bean at a node of the plurality of nodes.

25. The Java monitoring architecture of claim 24, wherein the plurality of resources includes a plurality of Java resources associated with a Java 2 Platform, Enterprise Edition (J2EE) engine, the plurality of Java resources includes one ore more of the following: kernel, services, interfaces, and libraries corresponding to a dispatcher or a server associated with the J2EE engine.

26. The Java monitoring architecture of claim 24, further comprises a monitor

service to couple the monitor tree with a central database and one or more client-level applications, wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications.

27. The Java monitoring architecture of claim 26, wherein the monitor service to retrieve an Extensible Markup Language (XML) file from the central database, the XML file having semantics and directives to generate the monitor tree.

28. The Java monitoring architecture of claim 24, wherein the monitor tree is generated using the semantics and the directives from the XML file.

29. The Java monitoring architecture of claim 26, wherein the one or more client-level applications include one or more of the following: a computing center management system, administrative tools, and third party tools.

30. The Java monitoring architecture of claim 29, wherein the administrative tools include a visual administrator having a monitor viewer to display the monitoring information.

31. The Java monitoring architecture of claim 30, wherein the monitor viewer includes one or more of the following: a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer.

32. The Java monitoring architecture of claim 30, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource.

33.   The Java monitoring architecture of claim 32, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored.

34.   The Java monitoring architecture of claim 32, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource.

35.   A Java monitoring system, comprising:

a monitor tree having a plurality of nodes, each of the plurality of nodes corresponding to a monitor managed bean and an associated resource of a plurality of resources;

a runtime managed bean in communication with the plurality of nodes to monitor the plurality of resources, and to provide monitoring information regarding the associated resource to the monitor managed bean at a node of the plurality of nodes; and

a monitor viewer in communication with the monitor tree via a monitor service to display the monitoring information.

36.   The Java monitoring system of claim 35, wherein the monitor service is further to couple the monitor tree with a central database comprising an

Extensible Markup Language (XML) file having semantics and directives to generate the monitor tree.

37. The Java monitoring system of claim 35, wherein the monitor service is further to couple the monitor tree with one or more client-level applications having one or more of the following: a computing center management system, administrative tools, and third party tools.

38. The Java monitoring system of claim 37, wherein the administrative tools include the monitor viewer.

39. The Java monitoring system of claim 35, wherein the monitor viewer includes a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer.

40. The Java monitoring system of claim 35, wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications.

41. The Java monitoring system of claim 35, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource.

42. The Java monitoring system of claim 41, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical

value, and the associated resource is not being monitored.

43.   The Java monitoring system of claim 41, wherein the monitor history

includes at least one of the following: a one-minute history of the

associated resource, a five-minute history of the associated resource, a

fifteen-minute history of the associated resource, a thirty-minute history of

the associated resource, and a one-hour history of the associated

resource.

44.   A machine-readable medium having stored thereon data representing

sets of instructions which, when executed by a machine, cause the

machine to:

associate a resource with a monitor managed bean at a node of a monitor

tree;

request monitoring information regarding the associated resource from a

runtime managed bean; and

receive the monitoring information at the node by the monitor managed

bean.

45.   The machine-readable medium of claim 44, wherein the sets of

instructions which, when executed by the machine, further cause the

machine to:

receive a notification from the runtime managed bean at the node by the

monitor managed bean, the notification including a signal indicating

availability of the monitoring information; and

in response to receiving the notification, request the monitoring

information from the runtime managed bean.

46. The machine-readable medium of claim 44, wherein the sets of instructions which, when executed by the machine, further cause the machine to:

receive a notification from a timer including an indication for the monitor managed bean to request the monitoring data; and

in response to receiving the notification, request the monitoring information from the runtime managed bean.

47. The machine-readable medium of claim 44, wherein the runtime managed bean includes a resource monitor to monitor one or more resources including the associated resource.

48. The machine-readable medium of claim 47, wherein one or more resources include Java resources associated with a Java 2 Platform, Enterprise Edition (J2EE) engine, the Java resources include one ore more of the following: kernel, services, interfaces, and libraries corresponding to a dispatcher or a server associated with the J2EE engine.

49. The machine-readable medium of claim 44, wherein the monitor tree is based on a Java Management Extensions (JMX)-based Java monitoring architecture.

50. The machine-readable medium of claim 44, wherein the sets of instructions which, when executed by the machine, further cause the machine to couple the monitor tree with a central database and one or

more client-level applications using a monitor service, wherein the monitor

service includes one or more of the following: connectors, adaptors,

interfaces, and applications.

51. The machine-readable medium of claim 50, wherein the sets of

instructions which, when executed by the machine, further cause the

machine to retrieve an Extensible Markup Language (XML) file from the

central database using the monitor service, the XML file having semantics

and directives to generate the monitor tree.

52. The machine-readable medium of claim 44, wherein the monitor tree is

generated using the semantics and the directives from the XML file.

53. The machine-readable medium of claim 50, wherein the one or more

client-level applications include one or more of the following: a computing

center management system, administrative tools, and third party tools.

54. The machine-readable medium of claim 53, wherein the administrative

tools include a visual administrator having a monitor viewer to display the

monitoring information.

55. The machine-readable medium of claim 54, wherein the monitor viewer

includes one or more of the following: a customized visual administrator

monitor viewer, a Web-based monitor viewer, and a Graphical User

Interface (GUI)-based monitor viewer.

56. The machine-readable medium of claim 54, wherein the monitoring

information includes one or more of the following: current monitoring

status of the associated resource, monitor history of the associated

resource, and general information regarding the associated resource.

57. The machine-readable medium of claim 56, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored.

58. The machine-readable medium of claim 56, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource.

59. A machine-readable medium having stored thereon data representing sets of instructions which, when executed by a machine, cause the machine to:

receive a request at a runtime managed bean from a monitor managed bean at a node of a monitor tree for monitoring information corresponding to a resource associated with the monitor managed bean; and

in response to the request, provide the monitoring information corresponding to the resource associated with the monitor managed bean to the monitor managed bean at the node.

60. The machine-readable medium of claim 59, wherein the sets of

instructions which, when executed by the machine, further cause the machine to provide a runtime notification from the runtime managed bean to the monitor managed bean at the node, the runtime notification including a signal regarding availability of the monitoring information.

61.   The machine-readable medium of claim 59, wherein the sets of instructions which, when executed by the machine, further cause the machine to provide a timer notification from a timer to the monitor managed bean at the node, the timer notification including an indication for the monitor managed bean to request the monitoring data from the runtime managed bean.

62.   The machine-readable medium of claim 59, wherein the monitor tree is based on a Java Management Extensions (JMX)-based Java monitoring architecture.

63.   The machine-readable medium of claim 59, wherein the sets of instructions which, when executed by the machine, further cause the machine to couple the monitor tree with a central database and one or more client-level applications using a monitor service, wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications.

64.   The machine-readable medium of claim 59, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource.

65. The machine-readable medium of claim 64, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored.

66. The machine-readable medium of claim 64, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource.